Hunters Point Cleanup Standards and EPA HQ dose 12 mrem/year

- In 2006, the Navy set its cleanup standards for Hunters Point Naval Shipyard ("Shipyard) in an Action Memo for a basewide removal action. At that time the general practice at EPA would have been to set cleanup goals at 10^-6 risk, based on the EPA PRG (Preliminary Remediation Goal) calculator. The NCP accepts a risk range of 10^-6 to 10^-4, so this allows room for evolution of standards to become stricter.

- Ra-226 is the primary Radionuclide of Concern at the Shipyard. EPA approved a cleanup goal of 1.0 pCi/g above background for Ra-226. All subsequent ROD's adopted this as the RG. Navy practice at the Shipyard has been to remediate any levels found above this RG. CERCLA sites nationwide have also generally followed this practice.

- In June, 2014, EPA HP issued a memo with an update that a dose of 12 mrem/year is equivalent to 3 X 10^-4 risk (vs. 15 mrem/year previously). EPA common practice is to use 1 X 10^-4 risk as an upper limit.

- EPA continually updates its PRG calculator. The August, 2017, version of the PRG Calculator estimates that 1 X 10^-4 risk would be equivalent to 0.7 pCi/g for Ra-226 (vs. ROD RG of 1.0 pCi/g). The estimate for 3 X 10^-6 risk for Ra-226 would be 2.0 pCi/g, which is twice the current RG. That risk level is not commonly used as a standard nationwide.

- These risk estimate includes an assumption of a durable cover installed in accordance with the RD's. The durable cover was originally intended to address metals, not radiation.

- To change an RG would require a ROD amendment.